

What is claimed is:

1. A pyrotechnic circuit breaker for use in an electrical circuit comprising:

- a) an electrically conductive portion including means for secure incorporation of the portion into the electrical circuit, wherein said electrically conductive portion is a fuse or is formed to be readily ablated or cut;
- b) a pyrotechnic igniter including an output end, said igniter secured so that said output end is oriented toward said electrically conductive portion;
- c) a passage between said output end of said pyrotechnic igniter and said electrically conductive portion; an
- d) a rupture area adjacent said electrically conductive portion and on the opposite side of said electrically conductive portion from said pyrotechnic igniter output end.

2. The circuit breaker of claim 1, further comprising a housing, wherein said rupture area is defined in said housing.

3. The circuit breaker of claim 2, wherein said housing is formed of a polymer.

4. The circuit breaker of claim 1, wherein said electrically conductive portion is a current load-based fuse.

5. The circuit breaker of claim 4, wherein said fuse is formed to be readily cut or ablated.

6. The circuit breaker of claim 5, wherein said fuse is a bolt-on fuse strip.
7. The circuit breaker of claim 1, wherein said electrically conductive portion is formed to receive a direct ablation force from the pyrotechnic igniter.
8. The circuit breaker of claim 7, wherein said electrically conductive portion includes an area that is flattened in a plane generally perpendicular to the output of said pyrotechnic igniter.
9. The circuit breaker of claim 7, wherein said electrically conductive portion includes an enlarged impact area that is enlarged in a plane generally perpendicular to the output of said pyrotechnic igniter.
10. The circuit breaker of claim 7, wherein said electrically conductive portion includes an area that is flattened and enlarged in a plane generally perpendicular to the output of said pyrotechnic igniter.
11. The circuit breaker of claim 8, wherein said electrically conductive portion is a current load-based fuse.
12. The circuit breaker of claim 11, wherein said fuse is a bolt-on fuse strip.

13. The circuit breaker of claim 1, further including a projectile between said pyrotechnic igniter and said electrically conductive portion, wherein said electrically conductive portion is formed to be readily cut by said projectile.

14. The circuit breaker of claim 13, further including a housing formed of polymer, wherein said projectile is molded into said housing.

15. The circuit breaker of claim 13, wherein said electrically conductive portion includes an enlarged impact area that is enlarged in a plane generally perpendicular to the output of said pyrotechnic igniter.

16. The circuit breaker of claim 13, wherein said electrically conductive portion includes an area that is flattened in a plane generally perpendicular to the output of said pyrotechnic igniter.

17. The circuit breaker of claim 16, wherein said electrically conductive portion is a current load-based fuse.

18. The circuit breaker of claim 13, wherein said electrically conductive portion has a periphery, and said rupture area has a perimeter selected so as to minimize the clearance between said rupture area and said electrically conductive portion.

19. The circuit breaker of claim 16, wherein said electrically conductive portion has a periphery, and said rupture area has a perimeter selected so as to minimize the clearance between said rupture area and said electrically conductive portion.

20. A pyrotechnic circuit breaker for use in an electrical circuit comprising:

- a) a current load-based fuse including means for secure incorporation of the portion into the electrical circuit;
- b) a pyrotechnic igniter including electrical leads and an output end, said igniter secured so that said output end is oriented toward said fuse;
- c) a passage between said output end of said pyrotechnic igniter and said fuse; and,
- d) a rupture area adjacent said fuse and on the opposite side of said fuse from said pyrotechnic igniter output end.

21. A pyrotechnic circuit breaker for use in an electrical circuit comprising:

- a) an electrically conductive portion including means for secure incorporation of the portion into the electrical circuit, wherein said electrically conductive portion is formed to be readily ablated or cut;

- b) a pyrotechnic igniter including electrical leads and an output end, said igniter secured so that said output end is oriented toward said electrically conductive portion;
- c) a passage between said output end of said pyrotechnic igniter and said electrically conductive portion; and,
- d) a rupture area adjacent said electrically conductive portion and on the opposite side of said electrically conductive portion from said pyrotechnic igniter output end.

22. The circuit breaker of claim 21, wherein said electrically conductive portion is a current load-based fuse.